

Figure 1:

Human TCR V α -1.5 (V α -8.2) coding sequence

ATGCTCCTGC TGCTCGTCCC AGTGCTCGAG GTGATTTTAA CTCTGGGAGG
AACCAGAGCC CAGTCGGTGA CCCAGCTTGA CAGCCACGTC TCTGTCTCTG
AAGGAACCCC GGTGCTGCTG AGGTGCAACT ACTCATCTTC TTATTCACCA
TCTCTCTTCT GGTATGTGCA ACACCCCAAC AAAGGACTCC AGCTTCTCCT
GAAGTACACA TCAGCGGCCA CCCTGGTTAA AGGCATCAAC GGTTTTGAGG
CTGAATTTAA GAAGAGTGAA ACCTCCTTCC ACCTGACGAA ACCCTCAGCC
CATATGAGCG ACGCGGCTGA GTACTTCTGT GTTGAGTGC CTTTTTCAGG
AGGAGGTGCT GACGGACTCA CCTTTGGCAA AGGACTCAT CTAATCATCC
AGCCCTATAT CCAGAACCCCT GACCCCTGCCG TGTACCAGCT GAGAGACTCT
AAATCCAGTG ACAAGTCTGT CTGCCTATTG ACCGATTTTG ATTCTCAAAC
AAATGTGTCA CAAAGTAAGG ATTCTGATGT GTATATCACA GACAAAACTG
TGCTAGACAT GAGGTCTATG GACTTCAAGA GCAACAGTGC TGTGGCCTGG
AGCAACAAAT CTGACTTTGC ATGTGCAAAAC GCCTTCAACA ACAGCATTAT
TCCAGAAGAC ACCTTCTTCC CCAGCCCAGA AAGTTCCTGT GATGTCAAGC
TGGTCGAGAA AAGCTTTTGAA ACAGATACGA ACCTAAACTT TCAAAACCTG
TCAGTGATTG GGTCCCGAAT CCTCCTCCTG AAAGTGGCCG GGTTTAATCT
GCTCATGACG CTGCGGCTGT GGTCCAGCTG A

Figure 2

Human TCR V α -1.5 (V α -8.2) protein sequence

	FR1
MLLLLVPVLEVIFTLGGTRAQSVTQLDSHVSVSEGT	
CDR1	FR2
PVLLRCNYSSSYSPSLFWYVQHHPNKGLQLLLKYT	
CDR2	FR3
SAAATLVKGINGFEAEFFKKSETSFHLTKPSAHMSDA	
CDR3	
AEYFCVVSPFSGGGADGLT	
constant	
FGKGGTHLIIQPYIQNP DPAVYQLRDSKSSDKSVCLF	
TDFDSQTNVS QSKDSDVYIT DKTVLDMRSM	
DFKSNSA VAWSNKSDFACAN AFNNSIIPED	
TFFPSPESSCDVKLVEKSFETDTNLFQNLSVIGFRIL	
LL KVAGFNLLMT LRLWSS	

Figure 3:

Human TCR V β -2.1 (V β -20.1) coding sequence

ATGCTGCTGCT TTCTGCTGCT TCTGGGGCCA GGCTCCGGGC TTGGTGCTGT
 CGTCTCTCAA CATCCGAGCT GGGTTATCTG TAAGAGTGGA ACCTCTGTGA
 AGATCGAGTG CCGTTCCCTG GACTTTCAGG CCACAACTAT GTTTTGGTAT
 CGTCAGTTCC CGAAACAGAG TCTCATGCTG ATGGCAACTT CCAATGAGGG
 CTCCAAGGCC ACATACGAGC AAGCGGTCGA GAAGGACAAG TTCTCATCA
 ACCATGCAAG CCTGACCCTG TCCACTCTGA CAGTGACCAG TGCCCCATCCT
 GAAGACAGCA GCTTCTACAT CTGCAGTGCT AGAGATGGGG GGGAGGGTTC
 GGAGACCCAG TACTTCGGGC CAGGCACGCG GCTCCTGGTG CTCGAGGACC
 TGA AAAACGT GTTCCACCC GAGGTCGCTG TGT TTGAGCC ATCAGAAGCA
 GAGATCTCCC ACACCCAAA GCCACACTG GTGTGCCCTGG CCACAGGCTT
 CTACCCCGAC CACGTGGAGC TGAGCTGGTG GGTGAATGGG AAGGAGGTGC
 ACAGTGGGT CAGCACAGAC CCGCAGCCCC TCAAGGAGCA GCCCGCCCTC
 AATGACTCCA GATACTGCCT GAGCAGCCGC CTGAGGGTCT CGGCCACCTT
 CTGGCAGAAC CCCCAGCAACC ACTTCCGCTG TCAAGTCCAG TTCTACGGGC
 TCTCGGAGAA TGACGAGTGG ACCCAGGATA GGGCCAAACC TGTCACCCAG
 ATCGTCAGCG CCGAGGCCCTG GGTAGAGCA GACTGTGGCT TCACCTCCGA
 GTCTTACCAG CAAGGGGTCC TGTCTGCCAC CATCCTCTAT GAGATCTTGC
 TAGGGAAGGC CACCTTGAT GCCGTGCTGG TCAGTGCCCT CGTGCTGATG
 GCCATGGTCA AGAGAAAGGA TTCCAGAGGC TAG

$\frac{14}{5}$

Figure 4

Human TCR V β -2.1 (V β -20.1) protein sequence

FR1
MLLLLLLGPGLGAVVSQHPSWVICKSGTSVKIECR

CDR1 FR2 CDR2
SLDFQATTMFWYRQFPKQSLMLMATSNEGSKATYEQ

FR3
GVEKDKFLINHASLTSLTSTLTVTSAHPEDSSFYICSARD

CDR3
GGEG

constant
SETQYFGPGTRLLVLEDLKNVFPPEVAVFEPSEAEISHTQ
KATLVCLATGFYPDHVELSWVNGKEVHSGVSTDQPPL
KEQPALNDSRYCLSSRLRVSATFWQNPРНHRCQVQFY
GLSENDEWTQDRAKPVTVQIVSAEAWGRADCGFTSESYQ
QGVLSATILYEILLGKATLYAVLVSALVLMAMVKRKDS
RG

figure 5

Human TCR V α -1.5 (V α -8.2) protein sequence

FR1
M L L L V P V L E V I F T L G G T R A Q S V T Q L D S H V S V S E G T

CDR1 FR2
P V L L R C N Y S S S Y S P S L F W Y V Q H P N K G L Q L L L K Y T

CDR2 FR3
S A A T L V K G I N G F E A E F K K S E T S F H L T K P S A H M S D A

Va8.2 CDR3 J45
A E Y F C V V S P F S G G G A D G L T F G K G T H L I I Q P

constant
Y I Q N P D P A V Y Q L R D S K S S D K S V C L F T D F D S Q T N V S
Q S K D S D V Y I T D K T V L D M R S M
D F K S N S A V A W S N K S D F A C A N A F N N S I I P E D
T F F P S P E S S C D V K L V E K S F E T D T N L N F Q N L S V I G F R I L
L L K V A G F N L L M T L R L W S S

figure 6

Human TCR V β -2.1 (V β -20.1) protein sequence

	FR1		
MLLLLLLLGPGSGLGAVVSQHPSWVICKSGT			
		CDR2	
	FR2		
SLDFQATTMFWYRQFPKQSLMLMAT			
	CDR1		
			<u>TSNEGSKATYEQ</u>

FR3
GVEKDKEFLINHASLTLSTLTVTSAHPEDSSFYCSARD

CDR3 J2.5
GGEGSETQYFGPGTRLVL

Constant 2
EDLKNVFPPEVAVFEPSEAEISHTQKATLVCLATGFYPDH
VELSWVNGKEVHSGVSTDPQPLKEQPALNDSRYCLSS
RLRVSAFWQNPRNHRCQVQFYGLSENDEWTQDRAKP
VTQIVSAEAWGRADCGFTSESYQQGVLSATILYEILLGK
ATLYAVLVSALVLMAMVKRKDSRG

Figure 7

TCR-retroviral constructs

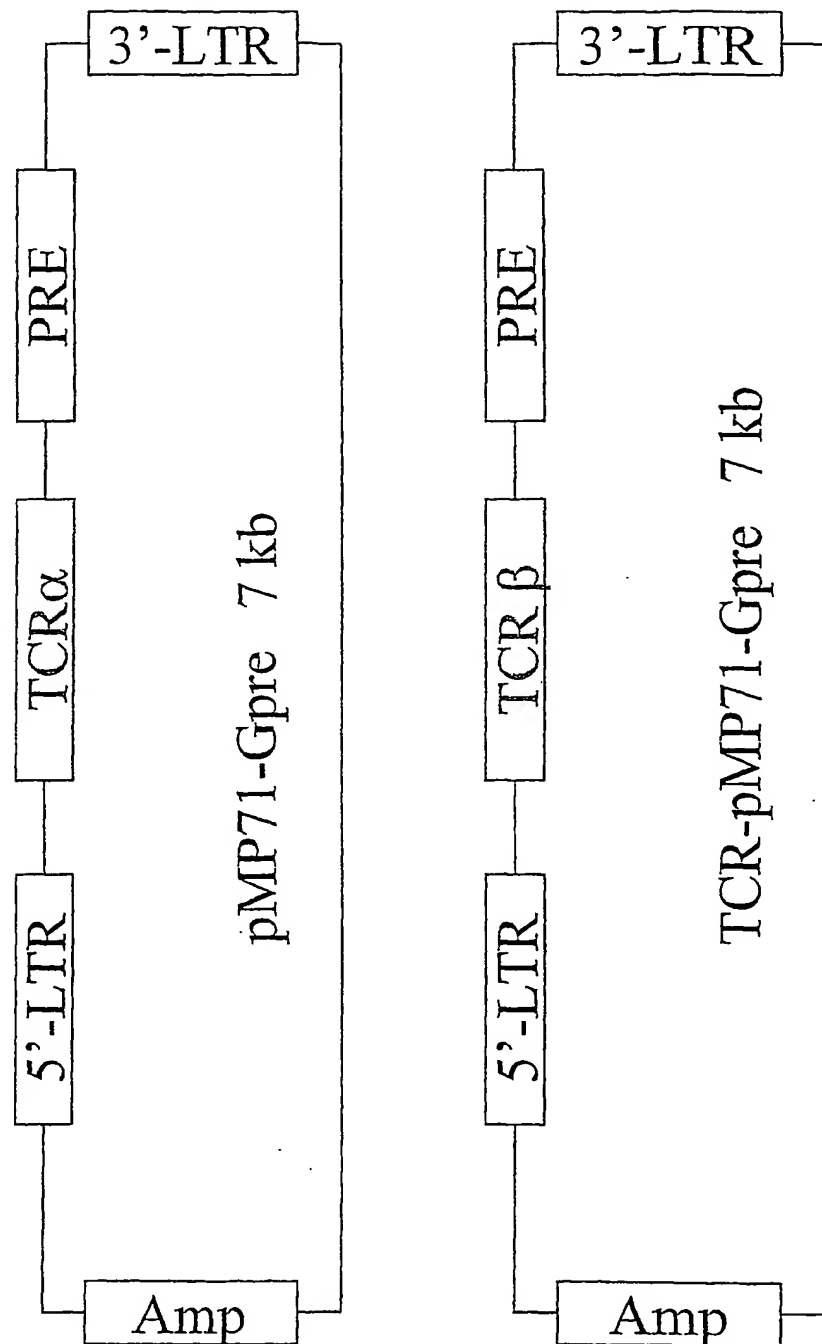


Figure 8

TCR Expression in Human PBMC after transduction

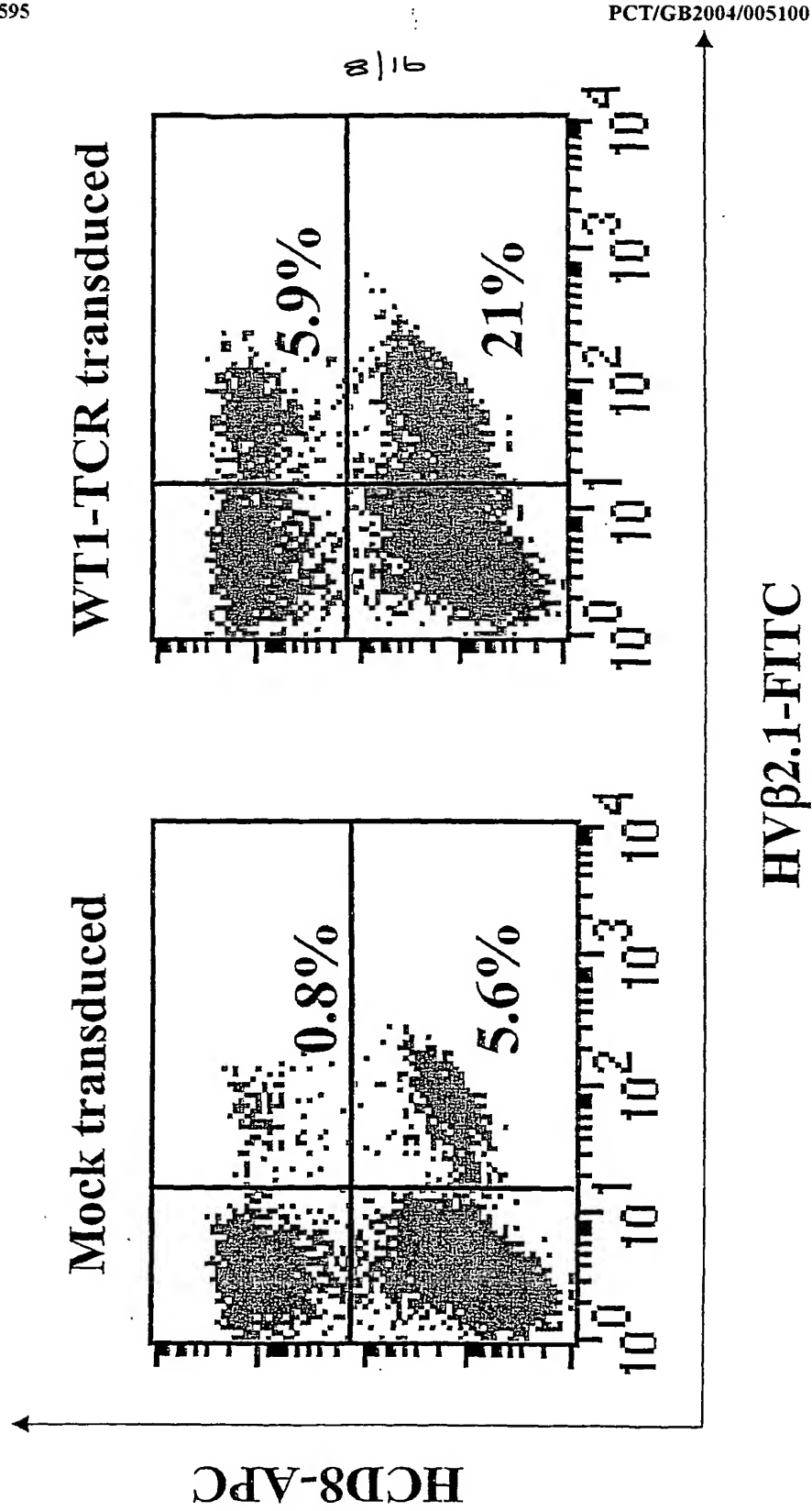
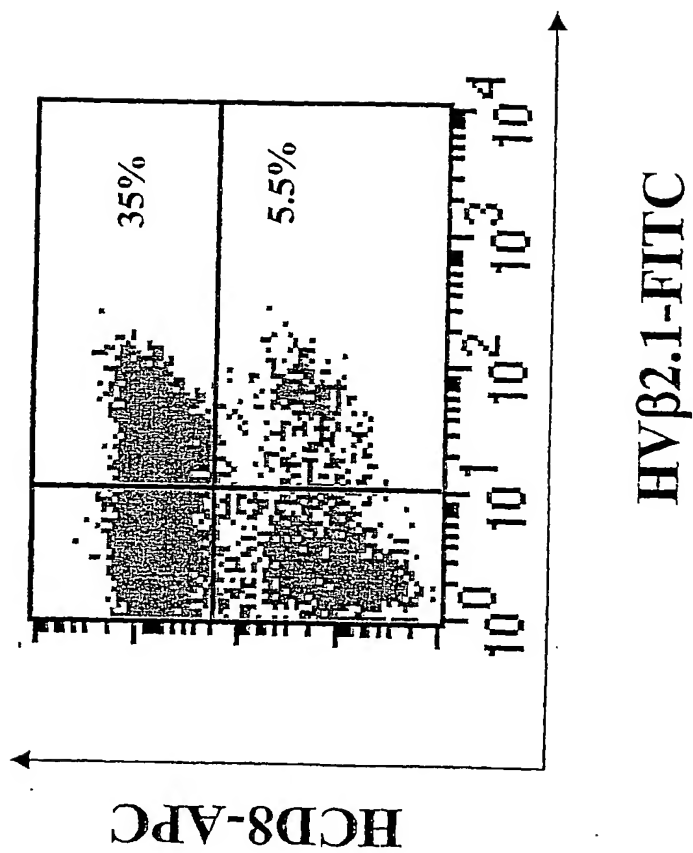


Figure 9

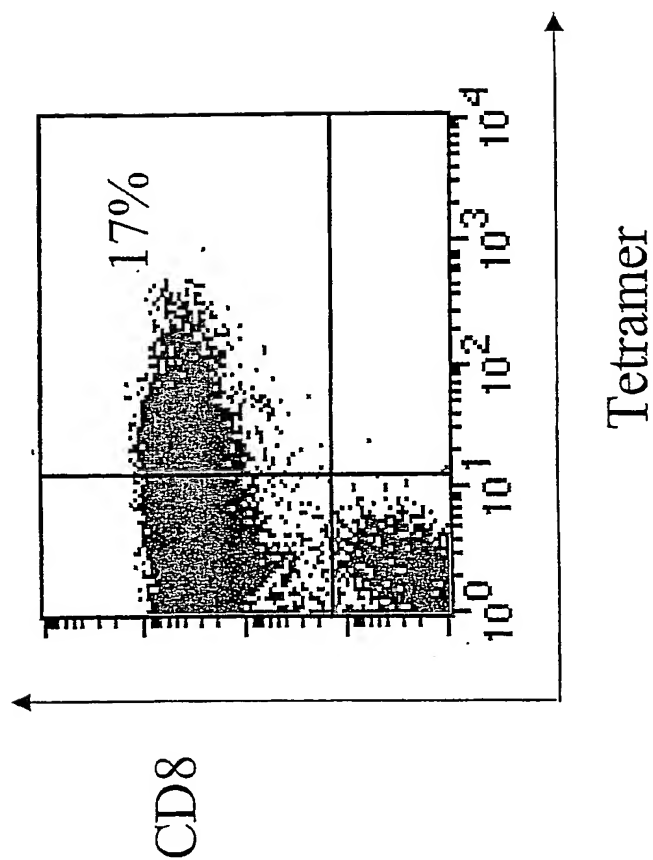
**Increase of CD8⁺-Vb2.1⁺ T Cells
after antigen stimulation**



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Figure 10

TCR specific for pWT126 transduced PBMC



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Figure 17

TCR transduced bulk T cells show pWT126-specific killing activity

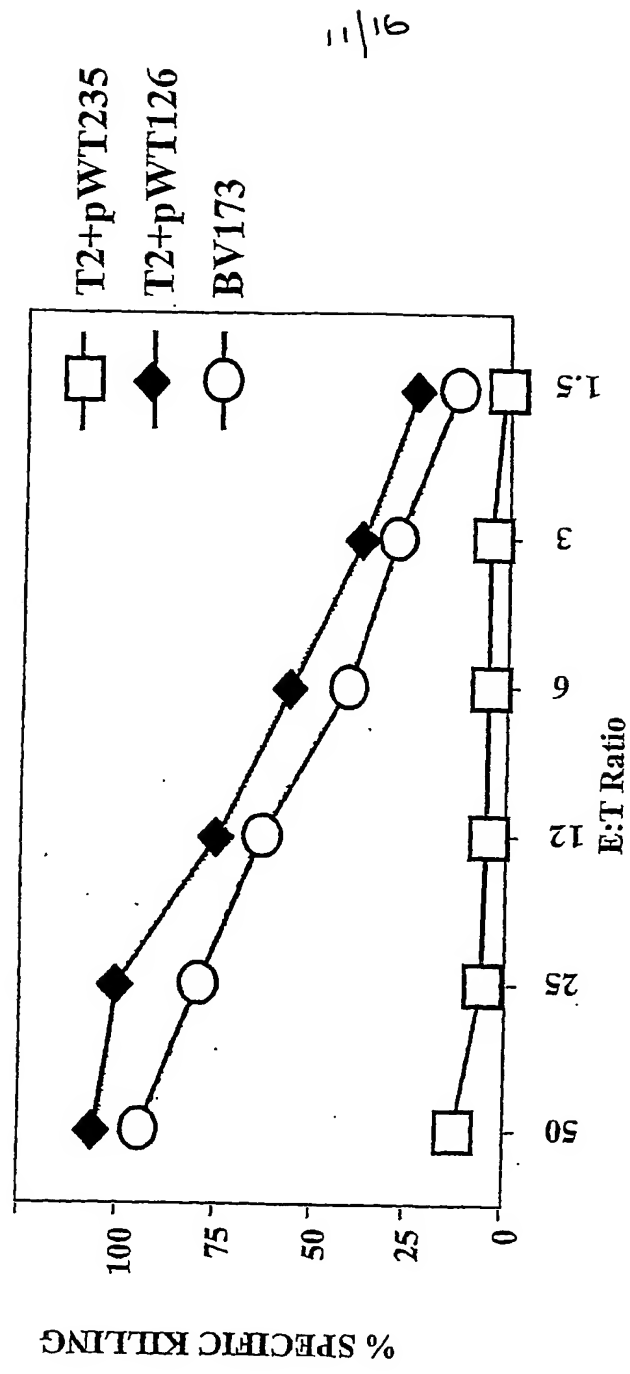


Figure : 12

TCR transduced CD8+ T cells show pWT126-specific killing activity

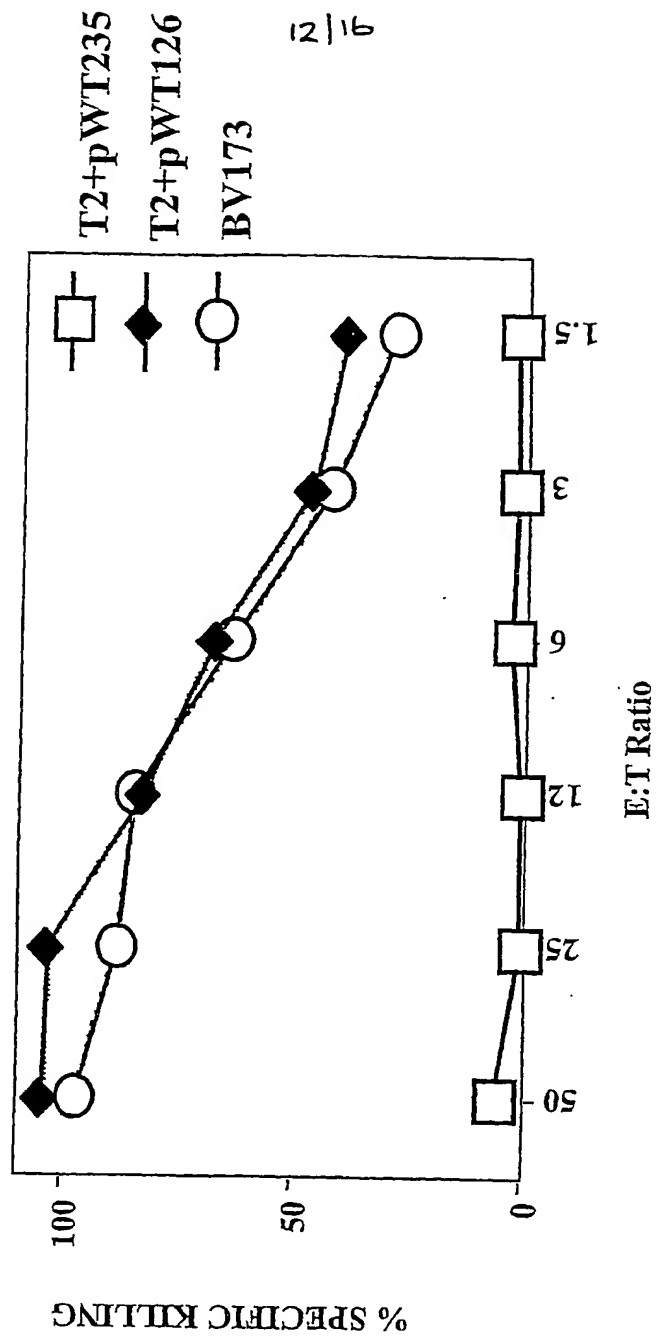


Figure 13

TCR specific for pWT126 transduced
PBMC sorted CD4

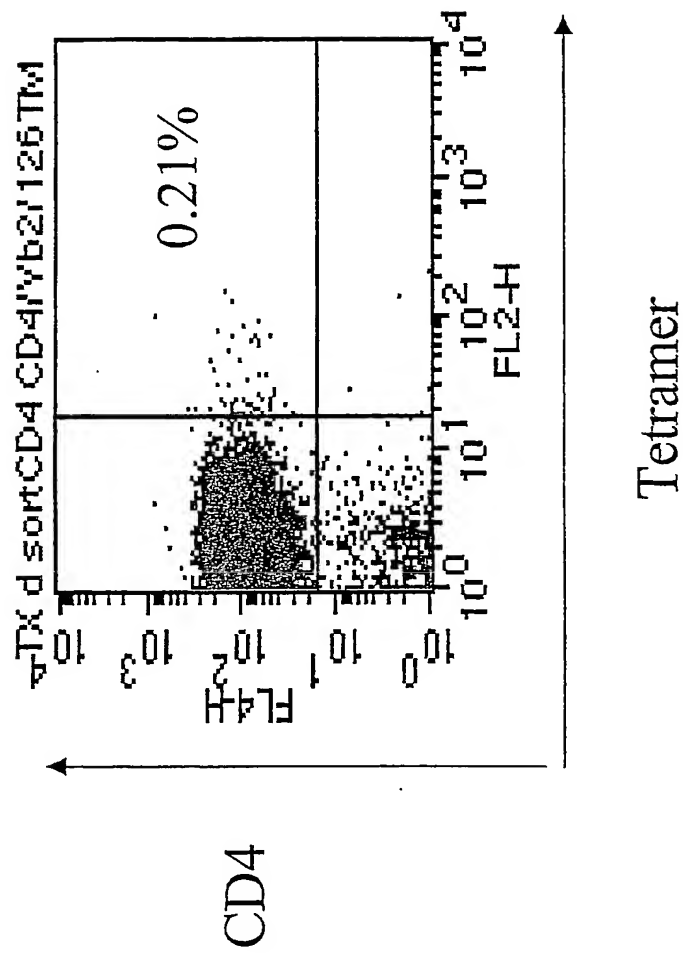


Figure 14

TCR transduced CD4+ T cells show pWT126-specific killing activity

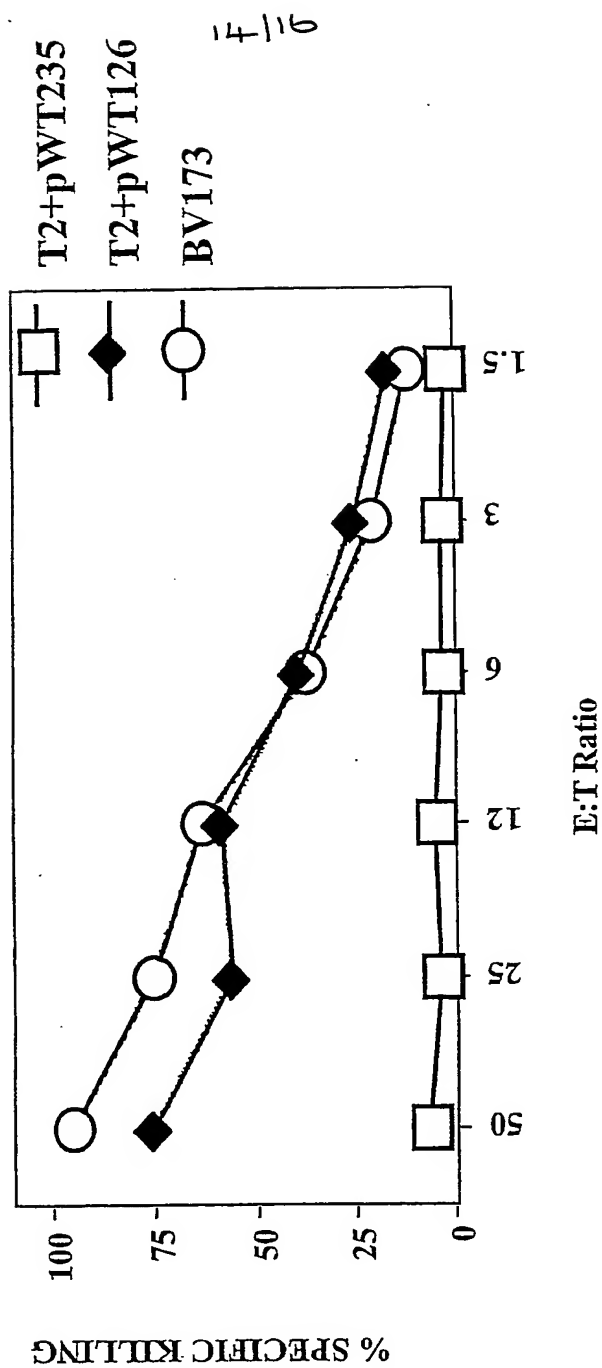
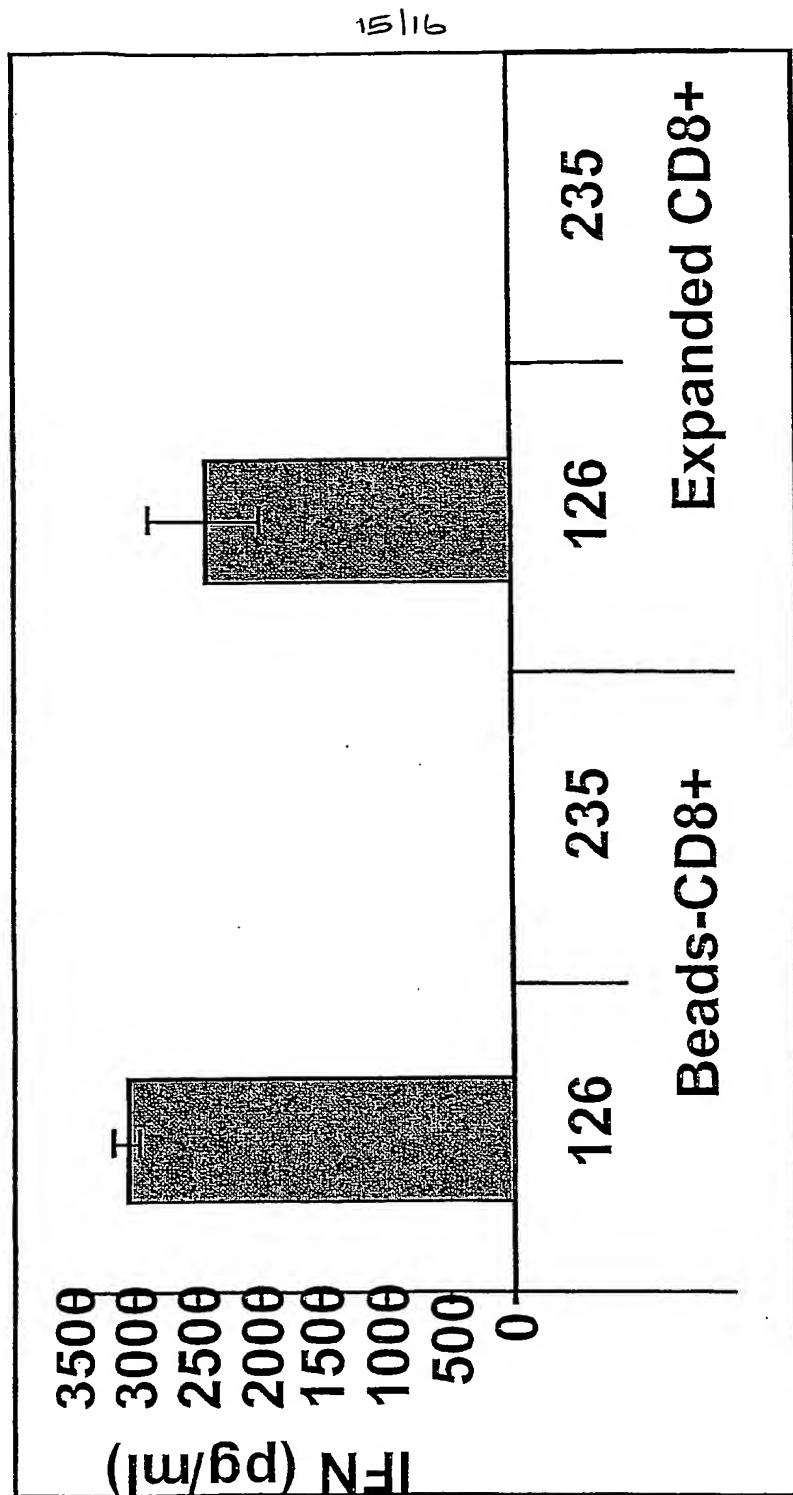


Figure 15

TCR transduced CD8+ T cells show pWT126-specific IFN- γ production



After 20 hrs incubation

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Figure 16

